

## No. 4.

Mr. JOHN GOW, Inspector of Mines, to the UNDER-SECRETARY of MINES.

REPORT on coal-mines, in compliance with section 67 of "The Coal-mines Act, 1891," for the year ended 31st December, 1896, for the Canterbury, Otago, and Southland Districts:—

## SOUTH OTAGO.

*Fernhill Mine.*—(26/8/96): All the working-places were examined, including the place where Thomas Reid was killed on the 25th instant. Most of the coal-hewing lately done was to the eastward of the main road, in which direction the mine-plan showed no workings, but after driving a short distance old workings were broken into. The extent of these old workings is not yet known. A similar discovery of old workings was made a short time ago on the west side of the mine, where a large area of virgin ground was supposed to exist. In this direction the extent of old workings has not been explored.

*Abbotsford Mine.*—(19/10/96): There are eight men employed at present splitting pillars in the old workings of twenty years ago. The floor in many of the old bords is now up to the roof, thus rendering it an easy matter to reduce the pillars with safety to the men. The removal of the coal is good hewing, but the roads are troublesome and somewhat cramped in height in places, in consequence of the constant rising of the floor. There is no lack of timbering where required to keep the mine safe. The coal is coming from the north side of the incline, and the men are working back towards the mouth of the pit. There is good air all through the working-places.

*Walton Park Pit, Green Island.*—(9/10/96): Examined the dip-workings to the level of the pump, which had lately been shifted from a lower level, in consequence of a recent influx of water in the low levels gaining on it. The water continues to rise in the dip-workings, and will, I fear, eventually drive the men out of that part of the mine. The miners are splitting the pillars as they retire, in case they may never get back to the dip-workings. It is said the mine has been "sailing so near the wind" for a long time past that the shareholders cannot afford to spend more money on plant, and that the present price of coal does not warrant any considerable outlay. I believe the mine is being worked at a heavy weekly loss.

*Saddle Hill Mine, Green Island.*—(3/10/96): All the mine-workings since my previous visit were examined, and found in splendid order. I also looked into some very old workings in an adjoining mine, on the south boundary, and found them in first-class order, and the air good. It is always a pleasure to pass through Mr. Christie's mine, where such care is taken to keep it in good order. Notwithstanding the large amount of dross necessarily piled up on either side of the bords and travelling-roads, the close supervision on the part of Mr. Christie has up to the present time prevented any fire taking place in the mine. At some future time an additional 6 ft. or 8 ft. of top coal will be taken down at a very small outlay of labour, leaving then a very strong coal roof. The mine is dry, and the air good.

*Bryce's Glenochiel Pit, Green Island.*—(2/10/96): Since my previous visit a new dip-drive to the coal has been put in on the west side of the old one, and at an easier gradient. A considerable amount of work has been done in the new part of the mine, and the coal-seam continues westward fully 9 ft. thick, of which about 3 ft. is left overhead for a roof. The pillars are 12 ft. square, and the bords are narrow. The vertical backs running north and south throughout this mine are a great saving of labour to the coal-hewers. The mine is well ventilated, and is in good order.

*Walker's Pit, Brighton.*—(9/10/96): All the mine was examined and found in good order. The seam is being worked to the east and to the south; it is getting thicker going east and thinner going to the south. The drainage is light, and the air is good. A coal roof is being left throughout the mine.

*McColl's Pit, Brighton.*—(9/10/96): The dip-drive is now in good order, several sets of new timber having been put in since my previous visit. The seam of coal has been followed to the north and west for some distance, in the hope that it would improve in thickness, but it is still about 4 ft. thick, and there is no indication of improvement. A foot of coal has to be left overhead for a roof, which reduces the thickness hewn to 3 ft., a depth which with a very soft floor renders it almost unworkable. McColl is now seriously thinking of sinking or boring 30 ft. or 40 ft. below the present workings, in the hope of finding a larger seam of coal. The locality has not been prospected to any depth.

*Sneddon's Pit, Mosgiel.*—(2/10/96). The new dip-drive, north-west of the old one, put in the hill to the westward a few months ago reached the coal in a short distance, and looked promising, but as the work proceeded the coal altered in quantity and quality. The seam eventually thinned out from 10 ft. to 3 ft. thick, of very bad quality generally. It is now discovered that the working-places from the old mine were driven nearly to the outside line of the good coal. The only good coal found in the new dip-drive was at the end of the old bords going west and north. The latest workings are to be surveyed to-morrow, immediately after which the mine at the two dip-drives will be abandoned, and a fresh start made about half a mile east of the old engine-site, and quite close to the old east workings, where a dip-drive is now in course of construction, being already on 9 ft. of clean coal. The extent of the coal on their lease on this side of the old field is not yet known. The long tram-line which conveys the coal from the old pit to the main highroad to Mosgiel is to be shifted next week at the top end to the latest dip-drive, the formation of much of which is now ready for the sleepers and rails. The winding-engine will be shifted next week to the new site, and by the end of the week the new place is expected to be in full swing on good clean coal.

*N. Hardwick's New Pit, Bruce.*—(25/6/96): Hardwick has lately driven a tunnel into the hill on the east side of his old pit, and at a much higher level than the old workings, where he has discovered a 10 ft. or 12 ft. seam of good coal. The tunnel was driven from the surface to